

HANDS FULL? JUST COUNT IT OUT.

Receiving a delivery should sound natural.

Say the carton count. Correct yourself.
Keep the evidence. Review the receipt.

6 cartons x 12 bottles = 72 received

2 damaged included. 70 usable.

COUNTBACK

**A voice-first goods-receiving
prototype for small shops.**

Live voice + deterministic counts

A draft you can inspect before export

THE PROBLEM

A box in each hand. A form still waiting.

A focused workflow for the moment between the truck and the shelf.

01

Count aloud

Cartons, loose units,
and damage in one flow.

02

Correct naturally

Replace the latest count.
Retain the earlier evidence.

03

Review and export

Inspect discrepancies,
then download a CSV.

Designed for small retail receiving; customer adoption and time savings are not yet measured.

HOW IT WORKS

One voice connection. Checkable local changes.

AssemblyAI handles speech, dialogue and voice output; the app owns the receipt.

Browser

PCM16 audio at 24 kHz
Transcript + draft receipt
Microphone or typed input

AssemblyAI

Voice Agent API
Speech recognition + dialogue
Voice output + tool calls

Count ledger

Validate quoted evidence
Replace product count
Compute totals in code

Server-side API key; short-lived browser token; 3-minute session cap.

Count history stays in browser memory. No inventory system or purchase order is changed.

THE WORKED EXAMPLE

A correction is a replacement, not an addition.

Synthetic purchase order PO-1048 / Northside Supply to Corner Store

Oat milk: 5 cartons ... correction, 6 cartons.

60 becomes 72 received. The original 5-carton count remains in history.

OAT MILK

72

2 damaged / 70 usable

COFFEE BAGS

24

Count matches order

CUP SLEEVES

45

5 short of the order

TRUST AND VALIDATION

The model suggests. The receipt can be checked.

What is implemented

- Deterministic carton and damage arithmetic
- Replacement corrections + retained history
- Duplicate tool-call protection
- Source quote matching across transcript chunks
- Manual review + CSV formula neutralization
- 10 passing unit tests

What still needs validation

- No field trial or measured business outcome
- Quote matching does not prove interpretation
- Microphone behavior depends on the device
- English, three fixed product lines in this demo
- No persistence or inventory integration
- Serverless demo limits are not durable quotas

TRY IT

From a spoken count to a reviewable receipt.

Working prototype, built with AI assistance by Alexandr Khrustalev / SanderSaxBuilds.

countback.vercel.app

Guided demo: no account, microphone or API calls.

Live modes: AssemblyAI audio, keyboard and sample speech.

Source: github.com/SanderSaxBuilds/countback

MIT licensed. Synthetic demonstration data. Review every count before using the CSV.